# INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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2. This document is a report of the following phototechnical plants in the USSR:

a. Research Institute NIFKI near Moscow

b. Photo Paper Plant in Leningrad

c. Film Plant at Shostka

d. Film Plant at Kazan

e. Gelatin Plant in Kazan

f. Sensitizer and Pigment Plant in Moscow

g. Compound Plant near Moscow

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2. This document is a report of [redacted] the following phototechnical plants in the USSR: 25X1

a. Research Institute NIFKI near Moscow [redacted] 25X1

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The total production of the photo-chemical industry of the USSR must be around 25-30 million square meters of photo paper and 22 million square meters of photographic film annually. Figured in running meters of 35-millimeter film, the latter figure amounts to 600 million meters. The GDR delegation was impressed by the excellent equipment in the plants and laboratories. As compared to the attention given to film production, there is not enough centralized research and development activity for the benefit of the photo paper industry. While the production of photo paper is much higher than in the GDR, this appears to be partly at the cost of quality.

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I. Research Institute Nifki near Moscow

The cinematographic department was already in new premises, while the chemical department was still working under unfavorable conditions in inadequate older quarters. It was expected to complete the removal of the entire chemical department to new quarters by 1958, at which time 300 scientists and 300 laboratory technicians were to be employed by the institute. Branches of the institute were under construction in 1956 in Kasan and Shostka. In addition to the Nifki Institute, the Leningrad Optical Institute and the Kiev Academy are engaged in photographic research.

The cinematographic department is mainly concerned with photographic techniques, automatic exposure, acoustics, sound recording, and the construction of photo cells, amplifiers, and speakers.

The seven laboratories of the chemical department deal with the photographic process, emulsions, color film, organic synthesis, backing, photographic reproduction, and radiographic materials.

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no universal wetting agent for emulsions has been discovered so far and that the laboratory for backing agents is working on improvements of triacetate materials7

II. Photo Paper Plant No 4, Volkovskaya Ulitsa 20,

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The Leningrad plant, located in what was formerly a chalk plant, produced after 1930 baryta and is now producing photo paper at the rate of 15 million square meters annually. In addition, the plant supplies photo baryta paper at a rate of 150 tons monthly to Photo Paper Plant No 6 in Kiev, Photo Paper Plant Krasnoyarsk, and to a small plant in Leningrad. For this purpose, the Leningrad Photo Paper Plant No 4 has four broad baryta coating machines and six emulsion pouring machines at its disposal. 25X1

The plant produces six types of black-white photo paper /technical specifications given/, technical paper, such as oscillograph and document paper, color photo paper, and instant photo paper used for a process equivalent to the Polaroid-Land camera. The plant employs 120 engineers and 860 workers. It obtains its electric power from the outside at 6,000 volts and transforms it to 380 and 220 volt current. The refrigeration plant operates with five compression units and produces 980,000 kilo-calories. Raw paper for the Leningrad plant is supplied by the Serpukhov plant in weights of 135 grams and lighter, and from the Krasnokamsk plant for weights of 240 grams per square meter and more. The quality of the raw paper is unsatisfactory with regard to whiteness, elasticity and chemical purity.

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III. Film Plant in Shostka

The installations include a pouring plant, emulsion plant, coating plant, finishing plant, recovery plant, and a plant producing magnetic sound film. No research department is maintained but a branch of the Nifki Institute which is to be established soon in Shostka is to engage in research regarding sensitizers and compounds.



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The Shostka plant has a labor force of 4,000 and produces 300 million meters of 35-millimeter film annually, slightly more than 10 percent of which are color film, a line started in 1948. The products include black-and-white films /types described , including cinematographic sound film and x-ray film/, cinematic color film, and magnetic sound film. The latter, which has been in production since 1951, is produced in widths of 6 and 35 millimeter, perforated in 35-millimeter width, and unperforated in 125 millimeter width for electric computers.

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IV. Film Plant in Kasan

The plant is located in mostly unplastered brick buildings, generously distributed over a large tract of land. The labor force of 4,000 consists to 75 percent of women. Some of the workers live near the plant and additional housing for plant employees is being constructed.

The Kasan plant produces nitro and triacetate film backing, black-and-white films, including cinematographic, 35-millimeter, and x-ray films, 35-millimeter and cinematographic color films, nitro wool for backings, and packing materials such as cardboard boxes and drums for cinematographic films.

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V. Gelatin Plant in Kasan

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The gelatin plant, a recent establishment, has very modern technical installations and buildings. It has at present a production capacity of 1,000 tons of photo gelatin annually and is expected to increase this capacity to 2,000 or 2,500 tons by 1960. Of the gelatin produced in Kasan, 80 percent are suitable for photographic purposes, the rest is used for other purposes. Only bone gelatin is produced and no inert gelatins are made. Kasan produces its own muriatic acid.

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VI. Sensitizer and Plate Plant in Moscow

The division of the plant devoted to the production of photographic plates is inadequate from the point of view of safety. Five types of emulsions are made which are partly stirred by hand. Two AGFA coating machines are used and produce 350,000 plates for scientific photography (astro-physical, spectral, infrared, and microscopic photography) annually. The GDR delegation was not given any information regarding the process used in making nuclear plates ("Kernplatten"). A new plant for photo plates is to be constructed within a few years.

About 10 types of sensitizers and a desensitizer are being produced in four laboratories, mostly following AGFA processing methods. Research for improvements and further development is carried on by the Nifki Institute.



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VII. Compound Plant near Moscow

The plant, located in the vicinity of Moscow, was built after 1945. It employs approximately 1,000 workers and 80 engineers. The engineers' training is about equivalent to that of a chemist graduated /from a German technical university/.

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